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BERKELEY LAW & TECHNOLOGY GROUP, LLP
17933 NW Evergreen Parkway, Suite 250
BEAVERTON, OR 97006

EXAMINER

FLETCHER, JAMES A

ART UNIT	PAPER NUMBER
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2621

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/972,870

Applicant(s)

WEI, CHING-YUAN

Examiner

James A. Fletcher

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 17 August 2007 have been fully considered but they are not persuasive.

In re page 10, Applicant's Representative states: "There is no disclosure in Beckert of 'a digital video and audio decompressing card' as recited in amended claim 18."

The Examiner respectfully disagrees. Beckert et al's disclosure of a module clearly meets the claimed "card" and the ability of the module to decode MPEG explicitly discloses digital audio and video decompression.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 18-19, 21-24, 40-42 and 44-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Beckert et al (6,202,008).

Regarding claim 18, Beckert et al disclose an optical media device (Col 3, line 65 – Col 4, line 12 "the computer 22 has a CD ROM drive which reads application-related CDs, as well as musical, video, game, or other types of entertainment CDs... A DVD [digital video disk] player may also be included in the computer") comprising:

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- a memory card slot capable of receiving a memory card (Col 4, lines 4-6 "dual PCMCIA card sockets 44 which accept PCMCIA card types I, II, and III");
- a digital video and audio decompressing card coupled to the memory card slot and capable of processing compressed audio and/or compressed video data signal stored on the memory card (Col 6, lines 12-16 : an audio signal processor 96 to perform the...Dolby pro-logicTM, AC-3 and MPEG decoding" and Fig 4, path 20 and Col 2, lines 39-40 "a digital signal processor [DSP] which performs the signal processing for audio and video data"); and
- a signal output port capable of outputting decompressed video and decompressed audio signals from the digital video and audio decompressing card means to an audio and/or video device (Col 4, lines 50-51 "The computer 22 can output visual data to the LCD 54 at the faceplate, or to the monitor 24" and Col 6, lines 16-18 "The audio signal processor 96 also drives digital to analog converters for a six channel audio output").

Regarding claim 19, Beckert et al disclose an optical media device, wherein the digital video and audio decompressing card means further comprises a digital video and audio decompressing chip (Col 6, lines 12-16 "an audio signal processor 96 to perform the...Dolby pro-logicTM, AC-3 and MPEG decoding" and lines 18-19 "The audio signal processor 96 is preferably implemented as a DSP [digital signal processor]") and the memory (Col 6, lines 27-33 "A fast data memory 110 functions as a high speed data communications buffer between the serial peripheral devices. The fast data memory is

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preferably implemented as a high speed SRAM...which provides high speed buffering...of audio data").

Regarding claim 21, Beckert et al disclose an optical media device wherein the digital video and audio decompressing card means is further capable of processing audio and/or video data received from an optical disc being read by the optical media device (Col 3, line 65 – Col 4, line 1 "the computer 22 has a CD ROM drive 38 which reads application-related CDs, as well as musical, video, game, or other types of entertainment CDs").

Regarding claim 22, Beckert et al disclose an optical media device wherein the optical reading device comprises a DVD device (Col 4, lines 11-12 "A DVD [digital video disk] player may also be included in the computer 22").

Regarding claim 23, Beckert et al disclose an optical media device for broadcasting digital video and audio signal, wherein the memory card comprises a compact flash card (Col 6, line 67 – Col 7, line 3 "These applications can also be stored on the hard disk drive 132 or on a removable storage medium, such as a CD ROM, cassette, PC-Card Flash memory, PC-Card hard disk drive, or floppy diskette").

Regarding claim 24, Beckert et al disclose an optical media device for broadcasting digital video and audio signal, wherein the memory card slot comprises an adapter, the adapter for adapting another memory card of a different form factor into the memory card slot (Col 7, lines 9-13 "The computer module 64 has a PC-Card interface 135 which includes a PC card socket used to support types I, II, or III PC cards [e.g.,

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extra memory, hard disk drives, modems, RF transceivers, network adapters, or other PC-Card peripherals]).

Regarding claim 40, Beckert et al disclose an apparatus further comprising a memory comprising a built-in program capable of processing video and audio operations (Col 6, line 67 – Col 7, line 3 “These applications can also be stored on the hard disk drive 132 or on a removable storage medium, such as a CD ROM, cassette, PC-Card Flash memory, PC-Card hard disk drive, or floppy diskette”).

Regarding claim 41, Beckert et al disclose an apparatus, comprising:

- means for reading compressed digital data from a memory card (Col 4, lines 4-6 “dual PCMCIA card sockets 44 which accept PCMCIA card types I, II, and III”), wherein the compressed digital data includes compressed digital image and/or compressed audio data (Col 4, lines 50-51 “The computer 22 can output visual data to the LCD 54 at the faceplate, or to the monitor 24” and Col 6, lines 16-18 “The audio signal processor 96 also drives digital to analog converters for a six channel audio output”);
- means for determining a file format for the compressed digital data stored on the memory card (Col 3, lines 47-48 “The computer 22 runs an open platform operating system which supports multiple applications”);
- means for decompressing the compressed digital data into decompressed image and/or decompressed audio data (Col 3, lines 11-12 “A DVD (digital video disk) player may also be included in the computer 22” Col 14, lines 13-18 “an audio signal processor 96 to perform the sound processing algorithms

- which may include: sound equalization, digital crossover, bass, treble, volume, surround sound, Dolby pro-logic™, AC-3 and MPEG decoding"); and
- means for outputting the decompressed image and/or decompressed audio data at an output port (Col 4, lines 50-51 "The computer 22 can output visual data to the LCD 54 at the faceplate, or to the monitor 24" and Col 6, lines 16-18 "The audio signal processor 96 also drives digital to analog converters for a six channel audio output"),
 - wherein said means for determining a file format, said means for reading the compressed digital data, said means for decompressing the compressed digital data, and said means for outputting the decompressed image and/or decompressed audio data are included in an optical media reading device comprising a digital video and audio decompressing card means and a memory (Col 3, lines 11-12 "A DVD (digital video disk) player may also be included in the computer 22" and Col 7, lines 9-13 "The computer module 64 has a PC-Card interface 135 which includes a PC card socket used to support types I, II, or III PC cards [e.g., extra memory, hard disk drives, modems, RF transceivers, network adapters, or other PC-Card peripherals]" and Col 6, lines 65-67 "The computer module 64 supports any variety of applications that the vehicle user might desire" and Col 6, lines 29-30 "The fast data memory is preferably implemented as a high speed SRAM").

Regarding claim 42, Beckert et al disclose an apparatus wherein said means for decompressing the compressed digital data includes means for executing a program on

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a decompressing chip on the digital video and audio decompressing card means, wherein the memory is coupled to the decompressing chip (Col 2, lines 39-40 "a digital signal processor (DSP), which performs the signal processing for audio and video data" and Col 6, line 67 – Col 7, line 3 "These applications can also be stored on the hard disk drive 132 or on a removable storage medium, such as a CD ROM, cassette, PC-Card Flash memory, PC-Card hard disk drive, or floppy diskette").

Regarding claim 44, Beckert et al disclose an apparatus wherein said means for reading the compressed digital data includes means for reading compressed digital data from a PCMCIA format memory card (Col 4, lines 4-6 "dual PCMCIA card sockets 44 which accept PCMCIA card types I, II, and III").

Regarding claim 45, Beckert et al disclose an apparatus wherein said means for reading the compressed digital data includes means for reading compressed digital data from a memory card inserted into an adapter that is inserted into a memory card slot in the optical media reading device (Col 7, lines 9-13 "The computer module 64 has a PC-Card interface 135 which includes a PC card socket used to support types I, II, or III PC cards [e.g., extra memory, hard disk drives, modems, RF transceivers, network adapters, or other PC-Card peripherals]").

4. Claims 28 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Beckert et al (6,202,008) including Beckert et al (5,794,164), incorporated by reference into Beckert et al '008 (Col 7, lines 37-43)

Regarding claims 28 and 33, Beckert et al ('008) disclose a method and an optical media reading device wherein decompressing the compressed digital data

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includes executing the built-in program on a video decompressing chip (Fig 4, item 94 "VGA Controller") on the digital video and audio decompressing card (), wherein the program is built-in to a memory coupled to the decompressing chip (Fig. 4 shows the VGA controller connected to the data bus 32, which is connected to Fig. 3 item 132 "Disk").

Beckert et al ('164) disclose the video decompressing chip on the video and audio decompressing card (Fig 3, "Computer module" shows CD Rom Driver 108, Smart Card Reader 42, and Display Driver 118 as being elements of the module).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 27-30 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckert et al.

Regarding claims 27 and 32, although Beckert et al do not specifically disclose the individual elements recited in the claims, they do disclose the use of a computer with optical reading device running a "Windows" operating system (Col 6, line 59 – Col 7, line 9), which is known to those of ordinary skill in the art of being able to perform the recited limitations.

The examiner takes official notice that determining a compressed image file format, reading, decompressing, and outputting the image file are notoriously well

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known, widely used, and commercially available steps for handling compressed digital image files.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beckert et al to include the steps mentioned.

Further regarding claims 27 and 32, Beckert discloses an optical media reading device comprising a memory including a built-in program capable of processing video and audio data (Col 2, lines 39-40 “a digital signal processor (DSP), which performs the signal processing for audio and video data” and Col 6, line 67 – Col 7, line 3 “These applications can also be stored on the hard disk drive 132 or on a removable storage medium, such as a CD ROM, cassette, PC-Card Flash memory, PC-Card hard disk drive, or floppy diskette”).

Regarding claims 38 and 39, Beckert et al disclose an apparatus and a method, wherein the compressed digital data comprises compressed audio data (Col 6, lines 12-16 “The support module 62 also includes an audio signal processor 96 to perform the sound processing algorithms which may include: sound equalization, digital crossover, bass, treble, volume, surround sound, Dolby pro-logicTM, AC-3 and MPEG decoding”), but do not explicitly disclose that the compressed digital data also includes video data.

The Examiner takes official notice that MPEG is a notoriously well known means of encoding and compressing video data, and since Beckert et al explicitly disclose the use of DVD video, notoriously well known for the use of MPEG video encoding and compression, that it would have been obvious to one of ordinary skill in the art at the

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time of the invention to modify Beckert et al in order to include compressed video data as elements of the compressed digital data.

Regarding claims 29 and 34, Beckert et al do not specifically disclose a method and an optical media reading device wherein determining a file format include identifying a JPEG image format file, they do disclose the use of a computer with optical reading device running a "Windows" operating system (Col 6, line 59 – Col 7, line 9), which is known to those of ordinary skill in the art of being able to identify a JPEG image.

The examiner takes official notice that identifying a JPEG image is a notoriously well known, widely used, and commercially available step for handling compressed digital image files.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beckert et al to include identifying a JPEG image.

Regarding claims 30 and 35, Beckert et al disclose a method and an optical media device wherein reading the compressed digital data includes reading files from a PCMCIA format memory card (Col 2, lines 21-25 and Col 3, line 63 – Col 4, line 12), but do not specifically disclose those files as being compressed digital image files.

The examiner takes official notice that compressed digital image files are notoriously well known, widely used, and commercially available means of storing, copying, and viewing of images taken by users, and allow a common, low cost means of doing so.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beckert et al in order to include reading of compressed digital image files from a PCMCIA card.

7. Claims 20 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckert et al as applied to claims above, and further in view of Kagle et al (6,601,056).

Regarding claim 20, Beckert et al disclose a versatile player (Col 6, lines 65-67 "The computer module 64 supports any variety of applications that the vehicle user might desire") but do not specifically disclose a player for MPEG layer 2 and layer 3 decoding.

Kagle et al teach an apparatus for broadcasting digital video and audio signal, wherein the digital video and audio decompressing chip support decompressing processes of MPEG layer 2 and/or layer 3 for decompressing video and audio signal which is stored in the memory card (Col 3, lines 53-58 "removable digital media output data in the format in which it is stored. The data formats may include JPEG [Joint Photographic Experts Group], GIF [Graphics Interchange Format], TIFF [Tagged Image File Format], BMP [Bit Mapped Graphics Format], MP3, WAV audio, Real audio, etc.").

As suggested by Beckert et al, and taught by Kagle et al, MPEG layer 2 and layer 3 decoders are well known, commercially available, and widely used decoders, providing the user with compact data storage and acceptable quality in reproduction.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beckert et al in order to include MPEG layer 2 and layer 3 decoding.

Regarding claim 26, Beckert et al disclose a versatile player (Col 6, lines 65-67 "The computer module 64 supports any variety of applications that the vehicle user might desire") but do not specifically disclose a memory including a program being able to identify the file format of the audio and/or video data stored on the memory card.

Kagle et al teach an apparatus for broadcasting digital video and audio signal, wherein the video and audio broadcasting program is able to identify GIF format stored on the memory card (Col 3, lines 53-58 "removable digital media output data in the format in which it is stored. The data formats may include JPEG [Joint Photographic Experts Group], GIF [Graphics Interchange Format], TIFF [Tagged Image File Format], BMP [Bit Mapped Graphics Format], MP3, WAV audio, Real audio, etc.").

As suggested by Beckert et al and taught by Kagle et al, the ability to identify and reproduce GIF format data images is a well known, commercially available, and widely used technology allowing the user to take advantage of the compression, motion, and quality features of the Graphics Interchange Format.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beckert et al to include the ability to identify and reproduce GIF format file data.

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8. Claims 25, 31, 36, and 41-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckert et al as applied to claims above, and further in view of Jones et al (6,438,638).

Regarding claim 25, Beckert et al disclose the use of a variety of storage media, but do not specifically disclose the use of a secure digital card, a compact flash card, a smart media card, a multi-media card, or a memory stick.

Jones et al teach an apparatus for broadcasting digital video and audio signals, wherein one of the memory card formats is a secure digital card (Col 2, lines 59-60 "CF-to-PCMCIA adapter 10 is a passive adapter that contains an opening that receives CompactFlash card 16").

As taught by Jones et al, secure digital cards are well known, commercially available, and widely used means of storing data in a medium that prevents disclosure to unauthorized persons and inadvertent erasure, while still providing a compact, portable medium.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beckert et al in order to provide a means of connection to a secure digital card.

Regarding claims 31 and 36, Beckert et al disclose a method and apparatus wherein files are read from a memory card, but do not specifically disclose reading a compressed digital image from a memory card inserted into an adapter that is inserted into a memory card slot in the optical media reading device.

Jones et al teach an apparatus for reading compressed digital image files through an adapter inserted into a PCMCIA socket (Col 1, lines 55-64).

As taught by Jones, adapters for memory cards are well known, widely used, and commercially available means for allowing a user to read data from a card that is not directly compatible with his reader, providing him with a low cost and simple means of reading data that would otherwise be unavailable to him.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beckert in order to include an adapter to the PCMCIA card reader.

9. Claims 37 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckert et al as applied to claims above, and further in view of Kagle et al (6,601,056).

Regarding claims 37 and 43, Beckert et al disclose an apparatus and method known to be capable of reading a variety of file formats (Col 6, lines 59-62 "The microprocessor 130 runs an open platform operating system 131, such Windows 95® or Windows NT™ or other Windows® derivative operating systems from Microsoft Corporation"), but are silent regarding the filename extensions being decoded.

Kagle et al teach a multiple medium capable reading apparatus and method wherein the file format is selected from the group consisting of JPEG, PSD, Amiga IFF, BMP, GIF, EPS, PCX, and TIFF (Col 3, lines 51-58 "At present, removable digital media, such as removable storage media, store data in the format in which it is received. Similarly, removable digital media output data in the format in which it is

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stored. The data formats may include JPEG [Joint Photographic Experts Group], GIF [Graphics Interchange Format], TIFF [Tagged Image File Format], BMP [Bit Mapped Graphics Format], MP3, WAV audio, Real audio, etc.").

As taught by Kagle et al, such file formats are well known and widely available, and the ability to read, process, and decode such formats provides users with versatile media readers, enhancing the usefulness of their media reading devices.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beckert et al in order to specify a variety of file formats.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Fletcher whose telephone number is (571) 272-7377. The examiner can normally be reached on 7:45-5:45 M-Th, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAF
29 October 2007



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600